Amendments to the Drawings:

The attached Fig. 1 makes changes to Fig. 1 and replaces the original sheet with Fig.

1.

Attachment: Replacement Sheet

REMARKS

Claims 19-36 are pending in this application. By this Amendment, claims 1-18 are canceled, and claims 19-36 are added. Reconsideration of the application is respectfully requested.

Applicants thank Examiner Thangavelu for the courtesy extended to Mr. Jackson (coinventor) and Messrs. Neff and Luo (Applicants' attorneys) during the September 12, 2005
telephone interview, and to Examiner Thangavelu's September 12 email letter. In particular,
Applicants thank Examiner Thangavelu for providing detailed suggestions in the September
12 telephone interview and email letter for amending the claims for better clarity. Based on
Examiner Thangavelu's suggestions, claims 1-18 have been rewritten into new claims 19-36.

The Office Action objects to the drawings. Fig. 1 is amended to clarify steps S1700 and S1800, as the Examiner suggested. No new matter is added. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

The Office Action objects to the specification. The specification is amended, as the Examiner suggested. No new matter is added. Accordingly, withdrawal of the objection to the specification is respectfully requested.

The Office Action rejects claims 1-18 under 35 U.S.C. §112, first paragraph and second paragraph. Claims 1-18 are rewritten into new claims 19-36, as the Examiner suggested during the September 12 telephone interview and email letter, as discussed above. Accordingly, withdrawal of the rejection of claims 1-18, and claims 19-36 to the extent applicable, is respectfully requested.

The Office Action rejects claims 1, 6, 8, 9 and 14 under 35 U.S.C. §103(a) over U.S. Patent Application 2003/0028266 to Jacques ("Jacques") in view of U.S. Patent Application 2003/0065409 to Raeth et al. ("Raeth") further in view of U.S. Patent 6,473,084 to Phillips et al. ("Phillips") and U.S. Patent 6,577,908 to Wojsznis et al. ("Wojsznis"); rejects claims 2, 10

and 15 under 35 U.S.C. §103(a) over Jacques in view of Raeth, Phillips and Wojsznis further in view of U.S. Patent 5,602,761 to Spoerre et al. ("Spoerre"); and rejects claims 4, 12 and 17 under 35 U.S.C. §103(a) over Jacques in view of Raeth, Phillips and Wojsznis further in view of U.S. Patent Application 2004/0155142 to Muravez ("Muravez"). These rejections are respectfully traversed, as if applied to claims 19-36.

The Office Action asserts that Jacques, Raeth, Phillips and Wojsznis, in combination, disclose or suggest the subject matter recited in the claims. However, one of ordinary skill in the art would not have been motivated to combine Phillips with Jacques.

Jacques discloses using a model to estimate the behavior of an apparatus, and using the estimated result to control the behavior of the apparatus. See paragraphs 0020 and 0022. Thus, the purpose for estimating the behavior of the apparatus is to use the estimated result to control the behavior of the apparatus.

On the other hand, Phillips is directed to prediction input in forecasting contests. See col. 1, lines 7-10; and col. 6, lines 54-64. Phillips discloses giving more weight to clustered predictions that have historically better prediction accuracies. See col. 11, lines 46-52. However, the weights are merely used in forecasting, such as in wagering event related to stock market or a Super Bowl game. See col. 1, lines 14-17. Thus, the weights are used only in attempts to match the result of an event. The weights are not provided for controlling the outcome of the event.

In view of the above, Phillips is not directed to controlling the behavior of an apparatus. One of ordinary skill in the art would not have been motivated to combine Phillips with Jacques because in the Jacques system, which controls behavior, there is simply no need for or benefit to be gained from, predicting behavior as per Phillips.

Furthermore, one of ordinary skill in the art would not have been motivated to combine Phillips with Wojsznis. In particular, Wojsznis discloses using models, each of

which is characterized by a plurality of parameters. See col. 3, lines 41-45. Each of the parameters has a respective value that is selected from a set of predetermined initialization values for corresponding to the parameter. Wojsznis further discloses using an adaptive parameter whose value is calculated for each parameter. See col. 3, lines 52-57. The adaptive parameter value is the weighted average of the initialization values assigned to the respective parameters. Thus, the weighting is used among parameters of <u>one</u> model. Wojsznis does not disclose or suggest weighting between two or more models.

In contrast, as discussed above, Phillips discloses giving more weight to clustered predictions that have historically better prediction accuracies. See col. 11, lines 46-52. Thus, Phillips discloses providing different weights to different predictions. Therefore, the weighting disclosed in Phillips is not a weighting between different parameters of one prediction model.

In view of the above, although Phillips and Wojsznis both disclose "weighting," their concepts of "weighting" are different. One of ordinary skill in the art would not have been motivated to combine Phillips with Wojsznis because the "weighting" of Phillips is incompatible with the "weighting" of Wojsznis.

In addition, Jacques, Raeth, Phillips and Wojsznis, even if combined, do not disclose or suggest adjusting the weights of at least two control system models that include increasing a weight of at least one control system model relative to a weight of at least one other model, and using the control system models and the adjusted weights in the dynamic controllers for dynamic control of the system during next time intervals, as recited in claim 19, and similarly recited in claims 27 and 32.

In particular, as discussed above, Phillips does not disclose or suggest using adjusted weights in the dynamic controllers <u>for dynamic control</u> of the system during next time interval. On the other hand, Wojsznis does not even disclose or suggest adjusting weights of

at least two control system models. Thus, Phillips does not supply the subject matter

admittedly lacking in Jacques, and Wojsznis does not supply the subject matter lacking in

Jacques and Phillips. Also, Raeth, Spoerre and Muravez do not disclose or suggest the

subject matter lacking in Jacques, Phillips and Wojsznis. Hence, Jacques, Raeth, Phillips,

Wojsznis, Spoerre and Muravez, even if combined, do not disclose or suggest the subject

matter recited in claims 19, 27 and 32, and claims 20-26, 28-31 and 33-36 depending

therefrom.

In view of the above, withdrawal of the rejection of claims 19-36 under 35 U.S.C.

§103(a), to the extent applicable, is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in

condition for allowance. Favorable reconsideration and prompt allowance of claims 19-36

are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place

this application in even better condition for allowance, the Examiner is invited to contact the

undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff

Registration No. 27,075

Gang Luo

Registration No. 50,559

JAO:GXL/sqb Attachment:

Replacement Sheet

Date: December 16, 2005

OLIFF & BERRIDGE, PLC P.O. Box 19928

Alexandria, Virginia 22320

Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION

Please grant any extension necessary for entry;

Charge any fee due to our Deposit Account No. 24-0037